

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) [A] An isolated polynucleotide encoding a cytolethal distending toxin, which is any one of:

(a) a polynucleotide encoding a polypeptide comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 2 ~~to~~ 4;

(b) a polynucleotide comprising ~~any one of~~ the nucleotide sequences of position 1 to 777; 802 to 1605; and 1615 to 2187 in the nucleotide sequence of SEQ ID NO: 1;

(c) a polynucleotide encoding a polypeptide comprising an amino acid sequence with a substitution, deletion, addition, and/or insertion of one ~~or more~~ to 30 amino acids in ~~any one of~~ the amino acid sequences of SEQ ID ~~NO: 2, or NOs: 2 to 4;~~

(d) a polynucleotide that hybridizes under a stringent condition of 1x SSC, 0.1% SDS, and 37°C to DNA comprising ~~any one of~~ the nucleotide sequences of position 1 to 777; ~~802 to 1605, and 1615 to 2187~~ in the nucleotide sequence of SEQ ID NO: 1;

—— (e) a polynucleotide encoding a polypeptide comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 52 to 54;

—— (f) a polynucleotide comprising ~~any one of~~ the nucleotide sequences of position 1 to 702; 778 to 1629; and 1632 to 2177 in the nucleotide sequence of SEQ ID NO: 51;

—— (g) a polynucleotide encoding a polypeptide comprising an amino acid sequence with a substitution, deletion, addition, and/or insertion of one or more amino acids in the amino acid sequence of ~~any one of~~ SEQ ID NOs: 52 to 54; and

—— (h) a polynucleotide that hybridizes under a stringent condition to DNA comprising ~~any one of~~ the nucleotide sequences of position 1 to 702; 778 to 1629; and 1632 to 2177 in the nucleotide sequence of SEQ ID NO: 51.

2. (Original) A vector comprising the polynucleotide of claim 1.

3. (Original) A host cell containing the polynucleotide of claim 1 or the vector of claim 2.

4. (Currently Amended) [A] An isolated polypeptide having cytolethal distending toxin activity, which is selected from the group consisting of: encoded by the polynucleotide of claim 1
(a) a polypeptide comprising the amino acid sequence SEQ ID NO:2;
(b) a polypeptide comprising an amino acid sequence with a substitution, deletion, addition, and/or insertion of one to 30 amino acids in any one of the amino acid sequences of SEQ ID NO:2; and
(c) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2.

5. (Currently Amended) A method for producing a cytolethal distending toxin in the polypeptide of claim 4, which comprises the step of culturing the host cell of claim 3 and collecting the produced polypeptide from the host cell or the culture supernatant.

6. – 30. (Canceled)